Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Additional Spectrum for Unlicensed Devices	)	ET Docket No. 02-380
Below 900 MHz and in the 3 GHz band	)	

COMMENTS
OF
LANS SERVICE CORPORATION

Lans Service Corporation ("Lans" or the "Company"), by its attorneys and in accordance with Section 1.415 of the Federal Communications Commission rules and regulations, respectfully submits its Comments in the above-captioned proceeding.[1]

I. INTRODUCTION

Lans, together with its affiliates, is one of the largest "black car" operators in the greater New York metropolitan area. It provides contractual or call-dispatched transportation services throughout the New York area. The many hundreds of vehicles dispatched by its personnel each day are an integral part of the metropolitan area's transportation services. They are used intensively by major organizations, including financial institutions, law firms, and other Fortune 500 Companies, all of which rely on these vehicles to transport their employees safely and efficiently in one of the most complex traffic situations in the nation.

Lans is one of the many private mobile radio service (PMRS) licensees whose business could not function without radio communications. The majority of the channels it uses are in the 470-512 MHz band, commonly referred to as the "T-band". This band is included in the spectrum identified in the instant NOI as a prospective home for the expanded use of unlicensed

devices. For the reasons described below, Lans urges the Commission not to designate this band as a preferred location for future unlicensed devices unless there is verified technical evidence to demonstrate that they can be deployed without creating destructive interference to entities such as Lans.

II. BACKGROUND

The T-band channels on which Lans operates are ideally suited for its particular communications requirements. It is one of a limited number of bands available to PMRS users, in which it is possible to be authorized for exclusive channel use within a defined geographic area.[2] Most of the Part 90 allocations provide for shared use with co-channel licensees required to coordinate and cooperate in their use of frequencies, including, but not limited to, a obligation to monitor for communications in progress before initiating a transmission.[3]

Shared use may be an acceptable option for entities with sporadic communications needs, but it would be an intolerable situation for an operation like Lans' and for those sharing a channel with the Company. Lans, like most transportation providers, uses spectrum intensively. Its use is similar to a taxicab operation or delivery service in the sense that there is regular interaction between the drivers in Lans fleet and the home office. If the Company's extensive roster of owner operators that operate under the system were required to monitor before each of their transmissions, or if co-channel licensees had to wait for a break in the company's transmissions before accessing the channel, they would find the situation unacceptable.

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[1] *Notice of Inquiry*, ET Docket No. 02-380, FCC 02-328 (rel. Dec. 20, 2002) ("NOI" or "Notice").
[2] 47 C.F.R. § 90.301 *et seq.*
[3] 47 C.F.R. § 90.403.

T-band also is particularly well-suited for Lans' operation because of its geographic parameters. The spectrum is available for land mobile use only in the top metropolitan areas such as New York and only within a limited radius around those markets. Users that require wide-area or regional coverage would find this band geographically unacceptable. However, for a company like Lans whose transportation services and related communications needs fall within the FCC-defined area for T-band usage in the New York metropolitan area, the geographic limitations of the band are not an issue.

The Company could not operate without reliable, efficient, interference-free two-way radio communications. Lans has made a significant investment in the acquisition of channels and equipment needed to operate a T-band system because these frequencies may be assigned for exclusive channel use within its required coverage area. Therefore, the Company urges the FCC to proceed cautiously before exposing the band to potentially destructive interference from unlicensed devices.

III. THE COMMENTS ON THIS ISSUE IN RESPONSE TO THE FCC SPECTRUM TASK FORCE REPORT RAISE SERIOUS CONCERNS ABOUT THE IMPACT OF ALLOWING OPPORTUNISTIC, UNLICENSED DEVICES TO OPERATE ON THESE CHANNELS

The central premise of the NOI appears to be that the FCC should promote the deployment of unlicensed devices and that the television broadcast spectrum, including the T-band channels on which the Company operates, is a promising band for expanded deployment. Lans does not disagree that there may be significant benefits to identifying spectrum on which additional unlicensed devices can be deployed. The Company also agrees that substantial portions of broadcast spectrum remain entirely unused, a fact that reaffirms the wisdom of the

FCC's decision several decades ago to allow at least some of that band to be shared with land mobile in the nation's largest markets.

However, Lans is concerned that the determination in the NOI that "it should be possible to design equipment that would monitor the spectrum to detect frequencies already in use and ensure that transmissions only occur on open frequencies,"[4] is significantly more optimistic than the assessment of a number of technical experts that addressed this issue in comments on the FCC's Spectrum Policy Task Force report. The difference may be that the FCC is thinking about unlicensed devices being able to detect and avoid broadcast transmissions in the band. Broadcast stations, of course, are always "on". By contrast, land mobile systems handle sequences of transmissions that are inherently intermittent in nature. Even a system like the Company's which uses its channels intensively has numerous, albeit brief, breaks in transmissions throughout their operating hours.

Lans believes it was the more complex characteristic of land mobile facilities that prompted technical experts such as Motorola and TIA to express significant reservations about the feasibility of unlicensed devices not interfering with authorized, incumbent uses. For example, in its comments on the Spectrum Policy Task reports, Motorola explained that "determining whether a frequency channel is unused is far more complex than simply measuring activity on that channel in any one location."[5] It also stated that "The fundamental task of determining and controlling the influence of a transmitter's emissions upon a remotely located

[4] NOI at ¶ 6.
[5] Motorola Comments on Spectrum Policy Task Force Reports at pp. 8-9.

receiver is an enormously complex problem." [6] TIA also expressed skepticism about the FCC's approach:

> While TIA supports the SPTF addressing cutting-edge and forward-looking issues (i.e. using "white spaces" – temporal sharing), the Commission must recognize that many of the technologies cited (e.g., opportunistic devices, software defined radios that are completely agile in terms of operating frequencies, bandwidths, and modulation formats, and ultra wide band radios) are not likely to be ready for commercial availability for some time. Finally, the Task Force promotes concepts (such as the "interference temperature") that today are unproven and undefined. Allocations based on anticipated advances in technology are dangerous, and should await the demonstrable existence of such technology at reasonable costs for widespread deployment.[7]

The FCC may be convinced that its vision of the future is both more accurate and more imminent than suggested by the manufacturing community. It may believe that moving forward with this proceeding will motivate equipment suppliers to develop the devices envisioned by the Commission. Nonetheless, from the perspective of an entity whose livelihood depends on the usability and reliability of its radio system, it will be disastrous if the FCC has miscalculated the technological capability of the wireless devices they hope to see deployed in the band.

If the complexity described above by Motorola has not been adequately addressed, there will be no practical ability for the FCC to control or recall devices that are being used by persons whose identities and locations are unknown to the FCC and who likely are entirely unaware that they are causing interference. The suggestion in the Notice that unlicensed devices somehow may be confined to defined geographic areas is equally implausible. Once the devices are made available, they will be used wherever the purchaser chooses to deploy them. It is a Pandora's box, which, once opened, will not be able to be closed.

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[6] Id. at p. 14.

IV. CONCLUSION

Lans is both a user of and beneficiary of advanced wireless technologies. It will welcome unlicensed devices in this band, but only after the FCC and equipment developers must come to agreement on the technical parameters that must govern them and after sufficient real-world operating experience has been collected to ensure that they will be transparent to the operations of authorized users in this band. However, until the FCC has addressed the reservations of the technical experts cited, above, it should defer any further action in this proceeding.

Respectfully submitted,

Lans Service Corporation

/s/
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[7] TIA Comments on Spectrum Policy Task Force Reports at p. 3.